

ABSTRACT OF THE DISCLOSURE

The pharmaceutical and/or cosmetic compositions for treatment of obesity and/or overweight contain an effective amount of a fatty-acid monoester of a 2 hydroxy derivative estrogen and a fatty acid wherein the estrogen is preferably a 2 hydroxy derivative of estrone, diethylstilbestrol, estriol, estradiol or ethinyl estradiol and the fatty acid is selected from the group consisting of the fatty acid oleic acid, arachadonic, palmitic, palmitoleic, linoleic, linolenic, cis 13 docosenoic acid, and the fatty acid, cis 15 tetracosenoic acid eicosenoic acid, especially cis 11 eicosenoic, although cis 5, cis 8, and cis 13 eicosenoic acid are also effective. The C-22 fatty acid monoester of estrogen, cis 13 docosenoic acid (Erucic acid), and the C-24 fatty acid monoester of estrogen, cis 15 tetracosenoic acid (Nervonic acid) are also effective and are included in this disclosure. In addition, synthesized combination molecules formed when a monounsaturated fatty acid of 20 carbon atoms or more is joined via an ester, ether, or amide bond to either a steroid or any molecule containing a perhydrocyclopentanophenanthrene nucleus or perhydrocyclopentanophenanthrene nucleus derivative are also included in this invention.

The fatty-acid monoesters mimic the function of estrone monooleate, as a signal that informs the brain of the size of fat tissue mass. In preferred pharmaceutical and/or cosmetic compositions for intravenous injection the monoester is incorporated in a lipidic suspension, prepared from lipoproteins or from liposome components, such as soy oil and egg phospholipids. When administered to rats with a 15% of total adipose tissue, they produce weight reduction of about 10%, by a new and unexpected mechanism. They are useful for the treatment of obesity and/or overweight in mammals, with the advantages of high efficacy and low toxicity.

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